

Vaccine Contents (solvents, adjuvants, preservatives, allergens, and excipients) (see NOTE)

Constituent	Vaccine ==>	Anthrax	BCG	DTaP*	DT*	Td*	HepA*	HepB*	Hib*	Influenza*	Lyme	JE
2-phenoxyethanol				X			X					X
Agar												
Alum+		X		X	X	X	X	X	X			X
Amino acids								X				
Amm onium sulfate										X		
Amphotericin B												
Ascorbic acid												
Bactopeptone												
Beta-propiolactone											X	
Benzethonium chloride		X										
Bovine albumin/serum								X				
Brilliant green												
Chlortetracycline												
Disodium phosphate									X			
DNA									X			
EDTA												
Egg protein											X	
Formaldehyde/formalin		X		X	X	X	X		X	X		X
Fetuin					X							
Gelatin				X						X		X
Gentamicin											X	
Glycerine												
Glycine				X	X	X						
Glycol p-isooctylphenyl											X	
Human serum albumin												
Hydrochloric acid					X	X						
Kanamycin												X
Lactose			X							X		
Magnesium stearate												
Monosodium glutamate												
Monosodium phosphate												
Mouse protein												X
MRC-5 cellular protein							X					
Neomycin											X	
Phenol												
Phenol red												
Polydimethylsiloxane												
Polymyxin B											X	
Polysorbate 20								X				
Polysorbate 80				X							X	
Potassium glutamate												
Potassium phosphate												
Silicon												X
Sodium acetate					X	X						
Sodium bisulfite											X	
Sodium borate								X				
Sodium chloride**		X	X	X	X	X	X	X	X	X		X
Sodium dihydrogen phos									X			

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Vaccine ==>	Anthrax	BCG	DTaP*	DT*	Td*	HepA*	HepB*	Hib*	Influenza*	Lyme	JE
Constituent											
Sodium hydroxide				x	x						
Sodium phosphate				x							
Sorbitol											
Streptomycin									x		
Sucrose								x			
Thimerosal			x	x	x		x	x	x		x
Tri(n)butylphosphate									x		
Triton N101									x		
Veal protein											
Yeast protein						x					

Vaccine Contents (solvents, adjuvants, preservatives, allergens, and excipients) (see NOTE)

Vaccine ==>	MMR++	Mening	Pneumo*	Polio (oral)	Polio (parenteral)	Rabies*	Typhoid (oral)	Typhoid* (parenteral)	Vaccinia	Varicella	YF
Constituent											
2-phenoxyethanol					x						
Agar								x			
Alum+						x					
Amino acids							x				
Ammonium sulfate											
Amphotericin B						x					
Ascorbic acid							x				
Bactopeptone								x			
Beta-propiolactone											
Benzethonium chloride											
Bovine albumin/serum				x		x			x	x	
Brilliant green									x		
Chlortetracycline						x			x		
Disodium phosphate								x			
DNA											
EDTA						x				x	
Egg protein	x					x					x
Formaldehyde/formalin					x						
Fetuin											
Gelatin	x					x	x			x	x
Gentamicin											
Glycerine									x		
Glycine											
Glycol p-isooctylphenyl											
Human serum albumin						x					
Hydrochloric acid											
Kanamycin											
Lactose		x					x				
Magnesium stearate							x				
Monosodium glutamate										x	
Monosodium phosphate								x			
Mouse protein											
MRC-5 cellular protein											
Neomycin	x			x	x	x			x		
Phenol			x					x	x		

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Constituent	Vaccine ==>	MMR++	Mening	Pneumo*	Polio (oral)	Polio (parenteral)	Rabies*	Typhoid (oral)	Typhoid* (parenteral)	Vaccinia	Varicella	YF
Phenol red					x		x					
Polydimethylsiloxane									x			
Polymyxin B						x				x		
Polysorbate 20												
Polysorbate 80												
Potassium glutamate							x					
Potassium phosphate											x	
Silicon												
Sodium acetate												
Sodium bisulfite												
Sodium borate												
Sodium chloride**			x			x	x		x		x	x
Sodium dihydrogen phos												
Sodium hydroxide												
Sodium phosphate											x	
Sorbitol	x				x							x
Streptomycin					x	x				x		
Sucrose								x			x	
Thimerosal		x	x				x					
Tri(n)butylphosphate												
Triton N101												
Veal protein										x		
Yeast protein												

Sources: Manufacturer's package inserts. Grabenstein JD. ImmunoFacts: Vaccines & Immunologic Drugs. St. Louis: Facts & Comparisons, 1999.

NOTE: Some contents listed are used in manufacturing but may be undetectable in the final product.

*Multiple brands. Specified contents may not be present in all brands. See package insert for specific contents.

+Aluminum hydroxide, aluminum potassium sulfate or aluminum phosphate.

**Generally used as a solvent with or without phosphate buffer.

++MMR or component vaccines

Vaccine Culture Media

Media***	Vaccine ==>	Anthrax	BCG	DTaP*	DT*	Td*	HepA*	HepB*	Hib*	Influenza*	Lyme	JE
Bovine protein												
Calf skin												
Chick embryo fibroblast TC												
Chicken embryo (egg)										x		
Cohen-Wheeler			x									
E. coli											x	
Human diploid TC (MRC-5)							x					
Human diploid TC (WI-38)												
Lathman			x									
Linggoud-Fenton			x									
Monkey kidney TC												
Monkey kidney TC (Vero)												
Mouse brain												x
Rhesus diploid TC												
Stainer-Scholte			x									
Synthetic/semisynthetic+++	x	x		x	x				x			
Veal infusion												
Yeast or yeast extract								x	x			

Vaccine ==> Media***	MMR++	Mening	Pneumo*	Polio (oral)	Polio (parenteral)	Rabies*	Typhoid (oral)	Typhoid* (parenteral)	Vaccinia	Varicella	YF
Bovine protein			X				X				
Calf skin									X		
Chick embryo fibroblast TC	X										
Chicken embryo (egg)											X
Cohen-Wheeler											
E. coli											
Human diploid TC (MRC-5)						X				X	
Human diploid TC (WI-38)	X										
Lathman											
Linggoud-Fenton											
Monkey kidney TC				X							
Monkey kidney TC (Vero)					X						
Mouse brain											
Rhesus diploid TC						X					
Stainer-Scholte											
Synthetic/semisynthetic+++	X							X			
Veal infusion								X			
Yeast or yeast extract											

Sources: Manufacturer's package inserts. Grabenstein JD. ImmunoFacts: Vaccines & Immunologic Drugs. St. Louis: Facts & Comparisons, 1999.

***Culture media used to grow organism. May be present in very small quantity. TC = tissue culture

+++ Generally amino acids, nutrients, casein